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RECORD OF ORAL HEARING

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROGER L. JOHNSTON

Appeal 2009-004993
Application 10/080,982
Technology Center 3600

Oral Hearing Held: September 14, 2010

Before JENNIFER BAHR, STEFAN STAICOVICI and
KEN B. BARRETT, *Administrative Patent Judges*.

APPEARANCES:

ON BEHALF OF THE APPELLANT:

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1 The above-entitled matter came on for hearing on Tuesday,
2 September 14, 2010, commencing at 1:20 a.m., at the U.S. Patent and
3 Trademark Office, 600 Dulany Street, Alexandria, Virginia, before Deborah
4 Rinaldo, Notary Public.

5 JUDGE BAHR: Good afternoon, Mr. Newholm.

6 MR. NEWHOLM: Good afternoon. May it please the board, at issue in this
7 case is whether various claims in the pending application for a triangulated
8 mobile gantry are indefinite under 35 USC 112, second paragraph, and
9 whether all the claims are obvious under 35 USC section 103(a).

10 I'm going to spend a few minutes on the 112 rejections hopefully mainly as a
11 housekeeping matter but I would like to spend most of my time on the
12 rejections based on obviousness.

13 Turning first to the rejection on indefiniteness, first the Examiner has some
14 problems with language in claims 1, 13, 14 and 16 through 18 which recite
15 that wherein clause, first, second and third longitudinal lines interconnecting
16 said first, second and third booms form an acute triangle.

17 It's Appellant's position that that meaning is perfectly clear on its face and
18 made even more so with reference to the underlying disclosure.

19 I would also like to point out that it's been a frustration over this rejection
20 being raised at this late point in the prosecution. The language at issue was
21 added after interview with the Examiner, I believe after the second office
22 action, and the Examiner examined the case without any objection or problem
23 with that language for another three office actions until finally raising the issue
24 in the first office action after RCE, request for continued examination.

25 But I think in context, it's perfectly clear what's being claimed. It's a gantry
26 that has three booms supported on the ground and all this limitation is doing is

1 describing the geometric relationship between those booms. If one were to
2 draw lines connecting those booms, first, second and third lines, it would form
3 an acute triangle.

4 Now, that precise language is not in the specification. Again, this language
5 was added after the application was filed as a result of the interview with the
6 Examiner. But I think that the concept is certainly understandable in isolation
7 and with reference to the entire application.

8 If you look, for instance, at figure 2 of the drawings, it clearly shows top plan
9 view. You can see three booms spaced from one another such that lines
10 connecting them would form an acute triangle.

11 Also, if you look at page 7, lines 17 through 19 of our specification recites a
12 front boom on a lateral to central line of the machine and a left and right rear
13 booms at opposed lateral sides of the line. That necessarily describes a
14 triangle.

15 Now, it need not necessarily been an acute triangle probably, but I think the
16 acute aspect is certainly supported by the drawings and I think more
17 importantly we're not dealing with a new matter issue here, objection or
18 rejection. We're dealing with a question of definiteness and I think it's
19 perfectly definite.

20 The Examiner seems confused by the fact that those lines are not expressly
21 shown in the drawings and, in fact, was making reference to the configuration
22 of the overlying support beams, pointing out that those beams form an A frame
23 in the disclosed embodiment.

24 I agree they do but that's not what's being claimed. We're claiming three
25 booms spaced to define an acute triangle and then beams supported on those
26 booms.

1 Any questions on that issue?

2 JUDGE BAHR: No.

3 MR. NEWHOLM: I'll spend just a very brief time on the Examiner's rejection
4 for the various claims for reciting the rigging contending that the Examiner is
5 not clear as to whether it's an apparatus claim or a method claim.

6 Again, this rejection was raised for the first time in the first office action after
7 RCE, after the Examiner had found no problems with that exact language at
8 least twice before that.

9 I'm, frankly, very surprised at this rejection. I think it's very clear from
10 underlying case law and office policy that this sort of functional language is
11 absolutely fine in a claim and there's nothing per se indefinite about it. It
12 certainly does not somehow create confusion as to whether it's an apparatus
13 claim or a method claim.

14 It's functional limitations within method claims perfectly acceptable pursuant
15 to --

16 JUDGE BARRETT: I don't think the Examiner was necessarily taking issue
17 with functional language being acceptable. I think the Examiner's position
18 was it's not clear that this is indeed functional language.

19 MR. NEWHOLM: The Examiner stated in his Examiner's answer that it was
20 unclear as to whether they were apparatus claims or method claims, if I recall
21 correctly. I can find that citation for you.

22 JUDGE BARRETT: That's fine. My impression was the Examiner was
23 talking about the limitation specifically. It looked like it may be method-type
24 limitation, specifically the wording in claim one, the rigging lifting the load
25 from the ground upon subsequent extension of the booms.

1 MR. NEWHOLM: Yes. It's reciting the intended function of the rigging
2 which I think is entirely acceptable pursuant to MPEP 2173.05 -- pardon me.
3 Pursuant to MPEP 2173.05(g) and In re Schreiber.

4 I think the proper interpretation for the Examiner there is to consider that
5 functional language, even method language, if you will, and pursuant to In re
6 Schreiber and 2173.05(g) determine whether or not the cited prior art is
7 capable of operating in the manner claimed.

8 If, in fact, the Examiner determined that it is capable of operating in the
9 manner claimed, then the Examiner could sustain or maintain a prior art
10 rejection based on it and it would be our burden to prove the prior art is
11 incapable of operating in that manner, again, pursuant to In re Schreiber and
12 that section of the MPEP. Does that answer your question?

13 JUDGE BARRETT: I think so. I think I understand your position.

14 MR. NEWHOLM: Finally, there was in claim 20 we had, frankly, a typo that
15 again was not discovered by the Examiner until very late in the game, in which
16 we had lack of antecedents for the term "the vehicle" when earlier in the claim
17 or the claim from which it depended recited a gantry.

18 This is the sort of thing that ordinarily I would never take to appeal. We, in
19 fact, tried to take care of it via an amendment filed simultaneously with the
20 Appeal Brief. That amendment was denied entry on the grounds that it did not
21 simply cancel claims.

22 I will say I think it's clear that something that lacks that antecedent basis does
23 not necessarily render a claim indefinite. You have to look at it in the
24 underlying context.

25 Here it's clear that "vehicle" is being used interchangeably with gantry. I will

1 say on the record if the board were to disagree, that's the sort of thing we will
2 happily amend to clarify the claim to maximize precision.

3 JUDGE BARRETT: Did you make that argument in the Briefs, that it was
4 clear on its face? Did you address the substance of the rejection?

5 MR. NEWHOLM: I, frankly, don't recall what was said in our Brief at this
6 point, which actually brings me -- moving into the prior art rejections to a
7 point, I have several things to say regarding the prior art rejections that might
8 not be expressly recited in our Brief, and that is because the Examiner obtained
9 translations of the three foreign -- well, more than three but today I'll discuss
10 three foreign language references that relied upon in the rejection at the time of
11 the issuance of the Examiner's answer and based several of his arguments on
12 those translations.

13 We did not have access to those translations prior to that and our attempt to
14 respond to it via Reply Brief were denied. So some of the statements I have to
15 say are based on amendments that have come to my attention or, I should say,
16 language that has come to my attention only since the Examiner's answer.
17 And I will point out that the Examiner, securing that translation so late in the
18 game, has been found by the board to be at least in violation of the spirit of
19 MPEP section 702.02 because it does and can and did in this case deny the
20 Appellant the opportunity to fully respond to the -- address the prior art being
21 used by the Examiner.

22 JUDGE BAHR: Did you obtain that translation?

23 MR. NEWHOLM: No, the Examiner did. We did not obtain translations.

24 JUDGE BAHR: You chose not to, then?

25 MR. NEWHOLM: Correct. The Examiner is relying primarily on drawings

1 until the end, until the Examiner's answer at one -- once the Examiner had --
2 let me back up.

3 The Examiner was relying on drawings and abstracts. There were English
4 language abstracts in some of the references. In the answer, the Examiner then
5 relied upon the body of the references.

6 JUDGE BAHR: You said you tried to respond to those and your Reply Brief
7 was denied entry?

8 MR. NEWHOLM: Yes.

9 JUDGE BARRETT: You had those translations before your Reply Brief,
10 right?

11 MR. NEWHOLM: Yes. Frankly, I don't recall what was said in the Reply
12 Brief at this point. I haven't gone back and looked at it again because it was
13 denied entry, so I knew it was not part of this record.

14 Okay. Turning now to the substance -- unless there's any other questions
15 regarding the 112 rejections. Okay. Turning now to the substance of the
16 rejections based on prior art. I am going to limit my comments today
17 regarding the rejection -- I'll call it the primary rejection based on the
18 combination of the Soviet Union patent, the French 460 patent and the French
19 502 patent or Gonzales. The Examiner relied on those.

20 The invention as recited in these various claims and rejected in these
21 references relates to a mobile gantry crane used to lift heavy objects which,
22 pursuant to the specification, I believe, on the order of 20 to 200 tons, with the
23 key elements being that instead of being traditional four-wheeled structures or
24 sometimes four-track structures, we have three independently mounted booms
25 that are then interconnected to one another by lift beams.

1 Those three booms provide a much stabler support surface than is provided by
2 a traditional four-point mount structure.

3 The specification describes a four-point structure as being akin to a chair
4 rocking on the floor. Whereas, this, what the client calls delta lift, the
5 three-point structure is much more stable, more akin to a tripod for mounting a
6 camera, say. That stability feature, I think, is important because it's not
7 addressed anywhere in the prior art.

8 Now, in addition to that, all the claims recite that each of those booms be
9 independently rotatable relative to the ground for steering purposes and that
10 depends on the claim, but all the claims require that at least one of the lift
11 beams connecting these three booms be extendable to vary the footprint, if you
12 will, of the machine.

13 The benefits of that in addition to -- versatility which the Examiner does hit at
14 very hard, is it greatly increases maneuverability. As mentioned in the
15 background of the application, the goal of this -- primary goal of this invention
16 was to permit these big, mobile cranes to be able to squeeze through doorways
17 or other tight places in buildings and still configure itself to lift the load and
18 carry a load.

19 The Examiner relies as a primary reference the Soviet Union 434 patent. That
20 is relevant, I think, more from an appearance as anything else. Most notably it
21 is a rail-mounted gantry. Not a ground-mounted gantry.

22 So the issue is of stability and maneuverability that are so important to us are
23 completely irrelevant to that machine. Since it's on rails, the rails provide the
24 stability, doesn't have to worry about rocking or having a badly distributed
25 load at least as much. And of course maneuverability, its travel path is always
26 determined by the rails.

1 One moment, please. Now, it is unusual the Soviet 434 crane in that it does
2 not have traditional four booms at the four corners of the gantry. It is mounted
3 on the ground at four support points via the wheels and the rails. So a big
4 difference from us right there. But instead of having the traditional four
5 booms, it's got two booms at one side and arguably one or two at the other side
6 but a single support point at the top.

7 So instead of having, if you will, a rectangular support structure at the top, it is
8 a triangular structure, one of which forms the major lift beam and the other of
9 which essentially provides reinforcement for that lift beam.

10 Now, even the translation of this reference, in my view at least, is not entirely
11 clear. So feel free to jump in if you disagree. But as I understand it, what they
12 were trying to do with this reference -- this invention is to be able to configure
13 rails relative to a building site so that one edge of the crane actually is outside
14 of the -- what was the term that they used here -- erection spacing, outside of
15 the erection spacing and the other one is within it.

16 And then by angling the main support beam backwards relative to the rail
17 that's inside the erection spacing, they can move the load closer to the work
18 area and get it right in there as opposed to having it being limited further away
19 from the key work area. At least that's my interpretation of the reference.

20 That of course is not at all dealing with any of the problems we're dealing
21 with, with our invention. So the resulting device has several key
22 differentiators from the invention. It lacks the three independent
23 ground-supported booms, it lacks the ability to independently move or rotate
24 each of the booms relative to the ground, and it lacks any ability to extend or
25 retract the various beams.

1 Now, with respect to the first two issues, that meaning the ground-supported
2 booms and the rotation of the booms relative to the ground, the Examiner
3 relies on the French 460 patent. Now, before I get into the details of that
4 patent, I would like to say whenever we start to talk about rail-mounting
5 machines and ground-mounting machines, we're already talking about
6 different fields of endeavor.

7 To say it would be obvious to replace rail-mounted booms or ground-mounted
8 booms is akin, in my view, to saying it would be obvious to take a train and
9 configure it to drive along the road. The train is configured to drive along the
10 tracks for a reason. And absent some other good reason, you don't -- there
11 would be no reason to configure the train to drive along the road.

12 So in my view to somehow replace the booms and the, I think they are called,
13 trolleys of the Soviet 434 patent with ground-supported rotatable booms really
14 would provide no benefit whatsoever to that system because it is clearly
15 designed to be on that fixed path and to move things into the erection area.

16 Again, remember, the whole reason that they have that primary lift boom at an
17 angle is to define the relationship that they want with respect to the erection
18 zone, I believe it's called.

19 If you don't have a fixed path going into that, there really would be no reason
20 to have the specific configuration they are claiming.

21 JUDGE BARRETT: You say the rail versus road-mounted are different fields
22 of endeavor. Wouldn't a person of ordinary skill in the art of gantry
23 engineering be familiar with both of those arts?

24 MR. NEWHOLM: I'm not necessarily saying it's not analogous art.
25 Different fields of endeavor, I still think they are. It's like oil extraction
26 versus oil storage in the In re Clay case. Those familiar with the industry

1 would know both fields because they are related but they have very different
2 applications and functionality.

3 Now, as far as the problems being addressed, the other half of the non-
4 analogous art test, I would say that the problems being addressed by the
5 French 460 patent aren't applicable to the Soviet Union 434 patent because of
6 the fact that there would be no reason, again, to provide maneuverability or
7 steerability to a rail-mounted system. In fact, it would just unnecessarily
8 complicate it.

9 And in the recently promulgated PTO guidelines on nonobviousness citing a
10 Supreme Court case which slips my mind right now, the PTO has said that that
11 is, in fact, an indicia of non-obviousness when there is an unnecessary
12 complication to the primary reference to no discernible benefit.

13 Now, with respect to the French 460 patent, I need, I believe, to point out an
14 error in the Examiner's answer in which he states that figure 5 shows that
15 machine as being supported on rails. So in fact, he seems to be making the
16 argument that the French 460 patent teaches the interchangeability of
17 rail-mounted gantries and ground-mounted gantries.

18 That is not the case. The translation of the 460 patent, as provided by the
19 Examiner, states that figure 5 shows the machine is rolling along, quote, a
20 transverse pathway, end quote. That's page 9, last paragraph.

21 Backing up a little bit, the French 460 patent is designed to permit -- it's
22 designed for use in cemeteries to permit the transport of vaults and crypts
23 around the cemeteries.

24 It does have something in common with our invention from the broadest scope
25 meaning maneuverability is important to it. And it does address some of the
26 maneuverability aspects of our invention but it doesn't suggest, contrary to the

1 Examiner's assertion, that its concepts are applicable to rail-mounted
2 machines. Again, I think apples to oranges.
3 Nor could I find any reference in the translation of the 460 patent to the
4 stability issue that we are addressing. It is, in fact, a three-wheeled structure
5 that is -- with three independently mounted booms. So I suppose one could
6 say the stability issue is inherent but it's still good law, even though it's
7 pre-KSR law, that inherency cannot be relied upon as an indicator of
8 obviousness when making a rejection based on prior art. Any questions about
9 the French 460 patent?

10 Okay. The last aspect of the invention that is not disclosed by the Soviet
11 Union 434 patent is the ability to increase or decrease the length of at least one
12 of the beams to, again, that's not used in the claims but to effectively alter the
13 footprint of the machine, to vary the spacing between the booms.

14 The Examiner relies alternatively on the French 502 patent and the Gonzales
15 patent. Now, the French 502 patent I think, frankly, is of little or no help to
16 the Examiner. It is simply a rail-mounted gantry with a hoist that has a
17 crossbeam that is of adjustable length for reasons that is unstated.

18 The Examiner stated earlier in the rejections that it was to accommodate tracks
19 of different widths which seemed to make sense to us, frankly, but he backed
20 away from that in the Examiner's answer when there was no language in the
21 French 502 patent to support it.

22 In any event, if, in fact, the reason to have that beam adjustable is, in fact, to
23 accommodate tracks of different widths, different rail spacings, there would be
24 no reason to apply that concept to a ground-mounted gantry because we're not
25 on rails at that point.

1 That brings us finally to Gonzales, which is a carpet hoist, which again, I think
2 is a different field of endeavor but does address some of the same problems
3 that gantries typically address.

4 This is a fairly lightweight machine that is pushed around by hand that is
5 designed to straddle a carpet, hoist it up -- carpet roll, and then move it to a
6 different location. I think it is relevant to the extent that the Examiner says it
7 is, in fact, laterally adjustable to accommodate carpet rolls of different sizes.

8 But again, I don't see how that's applicable to the Soviet Union 434 patent
9 when it's on a fixed-rail system and there's no indication of any need or desire
10 to adjust it in any manner to accommodate anything. Its footprint is fixed by
11 the rails on which it is mounted.

12 Now, with respect to those last two patents I would like to draw your attention
13 to claims 7 and 16 and method claim 18 which recite a specific -- one of those
14 booms being extendable. And that -- pardon me. Beams being extendable.

15 That would be the beam connecting the second and third booms. These claims
16 are essentially reciting the ability to open and close like a scissors. And it's
17 disclosed in our specification what that permits the machine to do is to, again,
18 squeeze through a doorway and then open up to straddle a load and lift the
19 load.

20 That particular ability or anything remotely suggesting the same problem is not
21 discussed anywhere in any of the references cited by the Examiner.

22 If you look at the Soviet Union 434 patent, to achieve that effect, what
23 essentially would have to -- I forget which numbers are used, but vary the
24 spacing between the horizontal beam located above the outboard rail. And I
25 see nothing to be gained by that within the realms of what the 434 patent is
26 trying to accomplish. It seems there would be nothing short of impermissible

1 hindsight reconstruction that would lead one to make that modification to the
2 Soviet Union 434 patent.

3 Finally, then, just a quick word on the method claims. The Examiner in
4 Examiner's answer basically said the same as the apparatus claims. So I'm not
5 going to -- he didn't spend any time on it.

6 I would like to point out from a procedural standpoint that that really is not
7 quite true. To the extent that the functional language that the examiner could
8 just say is being capable of performing in the apparatus claims, hence putting
9 the burden on us needs to be more expressly disclosed for the method claims --
10 for it to be relevant to the method claims.

11 Now, in the present case that is significant with respect to, for instance, the
12 recitation of the method claims of raising the vertical booms or the booms
13 vertically to lift the load. That particular concept is not discussed in any of the
14 references. And, in fact, I think only the 460 patent could arguably be
15 considered capable of doing it and instead uses a hydraulically-operated hoist
16 to raise and lift the load.

17 Also with respect to claim 18 again, that's where we expressly recite a method
18 form, the changing of the distance between the second and third boom to
19 straddle the load which, again, is not remotely suggested in any of the
20 references cited by the Examiner.

21 Now, of course there's other references relied upon for various other claims.
22 Suffice it to say I don't believe any of those references cure the deficiencies of
23 the primary references relied upon for the rejection of these broader claims.
24 Any questions?

25 JUDGE BARRETT: No, I don't believe so.

26 MR. NEWHOLM: Thank you very much for your time.

1 Whereupon, the proceedings at 1:46 p.m., were concluded.

2